The PELMAN SYSTEM *of* MIND *and* MEMORY TRAINING :: ::

LESSON

No. 6

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THE PELMAN SYSTEM OF MIND & MEMORY TRAINING

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LESSON VI.

LONDON
THE PELMAN INSTITUTE
FOR THE SCIENTIFIC DEVELOPMENT
OF MIND AND MEMORY
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Supplement

The E.M. Health Exercises

LESSON VI.

CONCENTRATION.

It is hardly possible to exaggerate the importance of possessing the power of concentration. Ability to focus the attention at will, and to maintain it in that condition, may be said to be one of the most fundamental of needed powers; it is a secret of memory efficiency, and it assists in the formation of self-confidence. Therefore, study very closely the sections that follow.

I. ATTENTION: SPONTANEOUS AND VOLUNTARY.

1. Attention is a focusing of Consciousness. It is not necessary in these lessons to go into the scientific details of the psychology of attention, except to distinguish between two principal kinds: (1) spontaneous, and (2) artificial or voluntary.

Spontaneous attention is a gift of Nature; everybody has it. Voluntary attention is a matter of education and habit. The first is common, but the second must be acquired by proper mental training, which it is one purpose of these lessons to give.

It is difficult to convince those who have not studied experimental psychology that the attention cannot possibly be held steadily on one thing for a single minute. Hold a ticking watch at such a distance from the ear that it

can only just be heard, and you will find that, in spite of your efforts, some of the ticks will drop out of consciousness, as if the teeth of the wheels were better oiled at some places than at others. The reason why you miss some of the ticks is that you become relatively inattentive every few seconds. The exact time for these fluctuations of attention in both seeing and hearing has been determined by experiment to be between three and four seconds, and Professor Ladd assures us that the images of the memory have been found to oscillate in the same way. But such details, while they may be interesting, are not important for the purpose of these lessons. What the student should observe is, that the attention can be trained to stand long sustained efforts just as any muscular exercise can be sustained by practice.

Attention Without Effort.

2. Spontaneous attention is that which a person pays, without effort, to anything which interests him. Many examples of it will readily suggest themselves ; such as a man looking at a house on fire, a woman at a milliner's shop, a boy at a game of football.

Voluntary attention is a development of spontaneous attention: a cultivated variety, differing from the other only in degree. For all purposes of memory, this voluntary attention is invaluable. The ability to hold the attention by a mere act of the Will is one of the marks of *a well-trained mind.* One of the greatest reproaches that can be brought against any man is that he does not attend to business—does not pay attention. The want of attention, which people complain of never refers to the spontaneous form, but to the voluntary ; and the inability to control it is generally spoken of

as "mind-wandering." Dr. Crichton Miller says that "the degree to which voluntary control can overcome involuntary movement of the attention is one of the surest measures of mental efficiency. The first aim of all true education is to enable the individual to determine his own area of consciousness."—(*Hypnotism and Disease*, p. 94.)

II. INTEREST MEANS SUCCESS.

3. But, as we have already said, attention is based entirely on interest. *You can never pay attention, in the true sense of the word, to anything which does not interest you.* You may fancy that you are paying attention at the time, but twenty-four hours later it will be demonstrated that you did not, because you will have forgotten the matter. *If you have no interest, you must be able to create interest; because, if there is no interest, there is no attention; and, if there is no attention, there is no memory.*

The mark of the expert in any calling which demands the attention of others is his ability to arouse their interest; to connect what he has to say with something in which they are interested.

The Human Appeal.

This ability to arouse interest is the secret of the story-writer's success. It does not matter much what he writes, so long as it is interesting. The advertiser who catches the public is the one who knows how to say what he has to say in an interesting way, to make his proposition fit in with the interests of the daily life of those who, he expects, will read his advertisements. The successful salesman is the one who can get his customers interested in his goods or in himself, it does not matter which. The successful lawyer is the one who can interest the jury;

they listen to him because he makes his plea fit into the thread of their life and thoughts. The successful preacher and lecturer is the one who can interest his audience. The minister who can make his influence the most widely felt is the one who can talk to the hearts of his congregation and not over their heads. Make anything interesting, and the attention must follow as surely as night follows day.

If you are a young man trying to make your way in the world, do not follow a calling which does not interest you, because you will never give it the attention that commands success. But, having made your selection, study above and before everything the interesting side of your business. If you are selling goods, for instance, store your memory with interesting facts about them. These are the things that hold a customer's attention and make him remember you and come to you again.

On Interesting the Child Mind.

4. *The seeking out of differences and agreements awakens the interest upon which all attention is based.* The great secret of teaching children lies in arousing their interest, and this can be accomplished best by comparing the things you wish them to learn with the things they already know, the things in which they already have some interest. If you want to awaken a boy's interest in the stars, you should not take him out on a clear night and point out to him the constellations of Cepheus, Corona Borealis, and Cassiopeia. What does he care about them? They are meaningless names in which he has not the slightest interest, and no matter how carefully you point out to him where they are, he does not pay real attention to them, and cannot find them on the following evening.

But if you ask him whether he knows that there is a soldier in the sky, with a belt round his waist and a dagger in the belt, he is all attention in a moment. For a week afterwards you will find him pointing out the constellation of Orion to his friends, and he will ask you to tell him some more about the stars.

Training the Attention.

5. If the student has conscientiously followed the directions in previous lessons, he has, perhaps unknown to himself, been practising the most important of all mental exercises—the cultivation of the attention. If he has been training his mind to examine things with a view to classifying them, and also to discovering their differences, his attention must have been concentrated upon the thing observed. It is impossible for the attention to stray off to other matters while you are trying to enumerate all the differences between two facts or ideas. The mind cannot wander very much when it is thinking out the resemblance between a butterfly and an oyster. Nothing will so effectually cure mind-wandering as thinking out the connection between two ideas, such as the pairs given in the fourth lesson.

It is impossible to over-estimate the value of this exercise in training the attention under the controlling and directing power of the Will. If the practice is persevered in, its benefits are incalculable.

III. CLASSIFICATION AND DEFINITION.

6. Nothing strengthens the memory to such a remarkable degree as training the mind to see all the chief relations of things one to another. Nothing so quickly betrays to the teacher the

weakness of the natural memory, and the necessity for its training, as the inability of the student to see minute as well as outstanding differences and agreements.

The man who wants an efficient mind must keep this fundamental principle constantly before him ; *if his perceptions are clear, all the other faculties of his mind will be strengthened in proportion.* Once get into the habit of seeing all the differences and agreements of things in which you are interested, and you double your mental efficiency for anything to which you apply yourself, though you may be unconscious of the improvement, so easily and naturally does it come. But it is there.

The chier fault with the beginner, in his first efforts to train mind and memory, is the failure to distinguish between classification and definition. They are different things and have different uses.

What is a Shaddock ?

7. *Classification* is finding a wider class, or genus, to which the facts or ideas under consideration belong. *Definition* is finding the smaller class, or species, which marks out one part of the genus as distinct from another part. If I ask you " what is a shaddock ? " and you say " a kind of orange," you classify it, you name a genus which includes many other fruits besides shaddocks. But if you tell me it is a tropical fruit, brought to America by Captain Shaddock, usually much larger than the common orange, something like a lemon in colour, and much more seedy than either a lemon or an orange, with a taste something between the two, and that it is sometimes called a grapefruit, you define it ; you mark it out as a distinct species of orange.

IV. AGREEMENTS AND DIFFERENCES.

8. *Agreements make classes; differences make individuals.* The perception of agreement, the ability to classify, enables us to remember large numbers of things in groups, so that one will recall the other. The series of Latin exceptions in the fourth lesson is such a group.

The perception of differences, the ability to distinguish, enables us to recognise things as individuals, and to remember them as distinct from other things. In this part of the problem of memory, classification is of no use. When a person walks into your office, it is not of the least assistance to your recollection of him to see that he is a man, or even to classify him by his nationality or age. What you have to do is to distinguish him as an individual, so that you can tell him from any other man without the slightest hesitation.

Confusing the Terms.

It is most important for the student to keep these two powers of the mind, classification and definition, distinct from each other, so that he shall always know when to classify and when to define.

A student, when asked to state the difference between certain things, often gives the agreement as well. This shows a failure to analyse the question itself before proceeding to the answer; a carelessness in noticing difference. In stating the difference between a railway and a road, he says that both are used for traffic, which is classifying them, instead of defining them by giving the one great and striking point of difference: the one must have rails and the other need not. In answer to the question,

what agreement is there between an art gallery and a post-office, many persons mention their use, the one for holding letters, the other for holding pictures. That is defining them, stating the difference when it is the agreement that is asked for. Both are public buildings.

9. *If you really want an efficient mind plus memory power, you must cultivate the habit of looking at things in this way.* Getting the impression into your mind by seeing the two great things, difference and agreement, is just like looking at a photograph through the two lenses of a stereoscope, blending the two images into a perfect and lifelike picture. You seem to see the actual form of the objects in their true perspective and in their proper relation to everything else in the field of view.

V. THE "HOW" OF CLASSIFICATION.

10. In classifying things, the first step must be to pick out some wider class to which they belong by finding some point or points in which they agree. Bain's rule is :—"Place together in classes the things that possess in common the greater number of attributes." This requires mental effort. It needs thinking about. That is exactly what you want. This thinking about things, this effort to see things in their relation to other things, is the very act that fixes them in the memory. Why ? *Because you must pay attention to them, and it is upon this attention that all memory depends*

An Illustration from History.

Suppose you are reading an interesting book, let us say, a history. The facts presented to your attention in this book which you wish to remember, must first be classified in your mind,

as you go along, by observing the wider class to which the smaller individual facts belong.

You must then distinguish them by studying their differences from similar events of the same class. Let us suppose, for the sake of an example, that you are studying the history of a Reformation. It belongs to the higher class of great public movements, but it is distinct from a revolution. In the class of Reformations in general, there are several individuals, such as the Reformation in Germany, that in Scotland, and that in England. The Reformation in Germany differs from the others in time and place, in its leaders, and in its results. By studying these international differences, you fix the details of the German, Scotch and English Reformations firmly in your memory.

The Pole Star belongs to the great class of heavenly bodies. You can bring it into the smaller class of fixed stars, but the Pole Star differs from other fixed stars in its position.

Classification in Natural History.

11. In classifying, the student should always stop to think whether his answer would not apply equally well to something entirely different. In answer to a question which we sometimes ask—"What agreement is there between a bee and an ant?"—many reply that both are insects, and some even say that both have legs. Both these answers include too large a class, and betray a want of close thinking and attention. There are hundreds of insects, and probably few students could define an insect exactly as having six legs and a segmented body. The answer that both have legs would apply equally well to human beings and chairs. The idea in such a question is to find the *smallest* class which will still include

both objects. Bees and ants are social, provident, and industrious insects.

In trying to discover the class agreement which will include a butterfly and an oyster, many students say they fail to see any agreement. But, as larger and larger classes are brought to mind, it must be evident that, if they have nothing else in common, they both possess animal life. Quite a number answer that one lives in the air and the other in the water, which is stating their difference, not their agreement.

Botany.

12. Ask a person unacquainted with botany the difference between shrubs and ferns, and he will be at a loss to answer, his memory running over what little he knows about both without fixing upon any characteristic which distinctly marks out one from the other. If you tell him that shrubs belong to the great class of flowering plants, while ferns do not, he will, perhaps, mentally challenge the classification and try to think of some shrub that has no flowers. If there were any such it would not belong to the class known as shrubs.

Look for the Class.

Knowing the classification of a fact or idea helps us to recall any individual member of that class. Every one is familiar with the trick of running over the letters of the alphabet to recall a name which has slipped the memory. We know that the name must be in the class of words that begin with a letter of the alphabet, and we try each in turn, which shows that this principle of finding things by looking for them in their proper classification is

the true one; *but, if you have never observed the class, where are you to look?*

Some students ask us this question: "Have I to classify everything that comes before me?" Our reply is "No; but follow our preceding instructions in reference to the duties you have to do, and the things you see that interest you. You will then acquire the ability to classify objects and ideas instinctively and without effort." When once you have classified a subject, or an object, *consciously*, the next time you meet either you will classify *unconsciously*.

VI. DEFINITION

13. In defining things, the first step must be to see what distinguishes them, what marks them out into smaller classes or individuals. *It is the perception of these differences that enables us to remember them as individuals.* It is this which makes it possible for us to know cotton from wool, and to avoid calling Mr. Jones Mr. Smith when we meet him. People with bad memories, those whose perceptive faculties are untrained, will often tell you that they cannot see any difference between certain things.

There is a somewhat rough and ready rule for coining definitions which, because of its common use, is worth noticing. The rule is:— "Find the class and determine the *difference;* the class added to the difference will give the definition." Thus, to define the word *hat* we find the class of objects to which it belongs, namely wearing apparel: the difference is that a hat is wearing apparel for the head. The definition would therefore run "A hat is a covering for the head." Practice in defining is an excellent exercise: and one's efforts can always be tested by consulting a good dictionary.

Secure all the Differences.

14. The student should endeavour to see all the differences possible in order to get a clear-cut impression of anything which he wishes to remember. Sometimes one difference will be sufficient to mark out a thing, sometimes two or more are required. In definition, as in classification, the student must be careful to avoid statements which would apply equally well to other things. To define a planet, for instance, it is not enough to say that it does not twinkle, because that applies also to the sun and moon, which are not planets. It is not even enough to say that a planet revolves round a central sun, because that is also true of comets. But if we say that a planet revolves around a central sun in a nearly circular path, we distinguish it from satellites and from comets, the first of which revolve around planets, and the second of which revolve around the sun in orbits which are not circular.

The more of these differences we can find, the more nearly we define the individual fact or idea, and the more distinctly and permanently we fix the impression in the memory. The more loosely we think about a thing, the more carelessly we observe it, the fainter is the impression it leaves, and the more likely it is to slip from our remembrance.

VII. ATTENTION AND CONCENTRATION.

15. There is a real difference between these words, but it is not a difference which need give us any trouble. When I walk along the street, and see a man fall from a ladder, the circumstances are of such a nature that I am compelled to give it *some* attention ; but if I am in a hurry to catch a train I give more attention

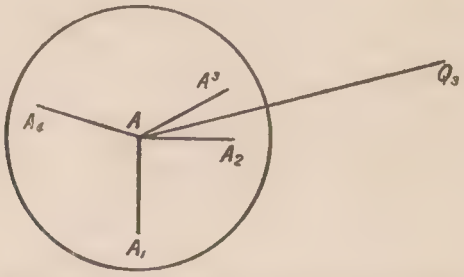
to *that* than I do to the accident. When I get into the train I take my papers out of my bag and begin to examine accounts, and I continue to do so for the next fifty miles. This may be called attention, but it is attention of such an accentuated character that I prefer to call it concentration. Attention, therefore, is a word that can be applied to swiftly passing phenomena, such as the flight of a bird, or the little whippersnapper of a dog who for a moment barks noisily at my heels ; concentration is a stronger word, and by it I mean focused and sustained attention.

Prof. James on "Voluntary Attention."

16. Now, here it is necessary to guard against misunderstanding. We have it on the authority of Professor William James that "there is no such thing as voluntary attention sustained for more than a few seconds at a time ; what is called sustained voluntary attention is a repetition of successive efforts which bring back the topic to mind." (*Principles of Psychology*, Vol. I, page 420.) Thus, while I am in the train considering income and outgo, my mind may travel from headquarters to the branch businesses in Birmingham, Liverpool, Glasgow and Belfast, and in turn I may revise my estimates of the branch managers in each case, but I am not guilty of mind-wandering. I have faithfully concentrated my attention upon business accounts, and since these accounts form an area of goods, branch shops and branch managers, I am bound to consider all three ; but, in so doing, my mind covers a good deal of geography, a considerable number of figures, and perhaps half a dozen distinct personalities. And yet it is all concentration on the pros and cons of a single balance sheet.

VIII. DIAGRAM ILLUSTRATING MIND WANDERING.

17. We may illustrate this by the following figure :—



A stands for the subject of concentration, namely *finance*, A_1, A_2, A_3, and A_4, stand for the four towns mentioned, and my mind travels to them forwards and backwards in connection with income and outgo. I do not, however, allow my mind to wander, for it moves within the circle of closely associated facts. But when I think, suddenly, of Q_3, which may be golf, a theatre, or something for the garden, I am guilty of mind-wandering because I go outside the circle of concentration.

The Danger of a Mere "Glance."

18. Where attention in its less accentuated forms is of value to the business man is in accurate observation. Let us suppose you receive a letter which says :

Dear Sir,

I can see you on Tuesday afternoon next, at 2 $\frac{30}{\text{P.M.}}$

Yours faithfully,

JOHN SMITH.

Now the figure 2 in that letter is so large and the 30 p.m. so small, by comparison, that unless the letter receives attention, so that you grasp the real time of the appointment, the eye

knowledge is apt to lead you astray. Appointments have frequently been confused because such letters have been read in great haste, and a mental note made of the time, which subsequent business has considerably weakened in its impression, so that when the day came round an endeavour to recollect resulted in the reproduction of the big "2" and "p.m."

Lawyers' Agreements.

The reading of a lawyer's agreement is too often done perfunctorily, sometimes in a spirit of trustfulness, sometimes because a hurried hour is unfortunately selected for the purpose, and sometimes because time is short and signatures are awaited. But later, when trouble begins and the agreement is taken out of the safe, the want of a little concentrated attention is painfully evident. The memory was misinformed because it never received a true knowledge of the most important clause.

All the way through life, this want of attention exacts its penalties. We may not be conscious of them every time we suffer, but it is something of a refinement in a tragedy to suffer and yet not to know it. We begin life with a lack of training in attention and we continue thus to the end.

Observant Attention.

19. Halleck tells us that a man once said to the pupils of a large school, all of whom had often seen cows: "I should like to find out how many of you know whether a cow's ears are above, below, behind, or in front of her horns. I want only those pupils to raise their hand who are sure about the position and who will promise to give a dollar to charity if the answer is wrong." Only two hands were raised. Their owners had *drawn* cows, and in

order to do that had been forced to concentrate their attention upon the animals. Fifteen pupils were sure that they had seen cats climb trees and descend them. There was unanimity of opinion that the cats went up head first. When asked whether the cats came down head or tail first, the majority were sure that the cats descended as they were never known to do. Anyone who had ever noticed the shape of the claws of any beast of prey could have answered that question without seeing an actual descent.

"Farmers' boys, who have often seen cows and horses lie down and rise, are seldom sure whether the animals rise with their fore or hind legs first, or whether the habit of the horse agrees with that of the cow in this respect. The elm-tree has about its leaf a peculiarity which all ought to notice the first time they see it, and yet only about five per cent. of a certain school could incorporate in a drawing this peculiarity, although it is so easily outlined on paper. Perception, to achieve satisfactory results, must summon the will to its aid to concentrate the attention. Only the smallest part of what falls upon our senses at any time is actually perceived."

IX. HOW TO TRAIN THE MIND FOR CONCENTRATION.

20. First, as previously intimated, we must obtain the power of interest. Presumably you have one or more interests already, and the fact that you have taken up this course of study indicates that you are interested in mind and memory training; but see to it that these motive powers are deepened in volume and force, because the attention that comes from interest is better than the interest that comes from attention—it is more primary and vigorous, and more lasting.

Adverse External Conditions.

21. Next, you must remove all adverse conditions. Sometimes these conditions are physical. Exercises in concentration should not be taken when the body is weary, otherwise there is an undue strain on effort, and the brain is forced to do work against its will. Again, proper surroundings of a physical kind are necessary. It is practically impossible to concentrate, at least until you have acquired the habit of disregarding noises—the Italian piano outside, the English piano next door, the shouts of children in the street. Choose a time for concentration when you yourself, and outward things generally, are in the best possible condition for that purpose.

Adverse Internal Conditions.

22. But there are internal conditions equally important. You cannot concentrate your attention on one of these exercises if your mind is busy with a first-class worry; you must have a care-free mind if you would do good work carrying out the injunctions of this lesson. Last of all comes the question of Will-power. The man who frequently complains of a lack of concentration is usually a man who has not learned the art of governing himself; unless, of course, the trouble arises out of some difficulty due to nervous illness or fever. In the long run, everything depends on Will. Datas, whose counsel has been secured by the Pelman Institute for the sake of its students, says in reference to this matter: "Interest, or making a thing your hobby, goes a long way in mastering difficulties, but Will-power, a determination to do or die, is almost as important. I used to become quite absorbed in a book of dates—so much so that my

parents feared for my reason ; but I can see now how much Will-power there was in my methods. I kept myself up to the scratch."

Datas on Concentration.

" Again : I concentrated. My motto was : ' One thing at a time, and that learned well.' Many people have asked me, time and again, how I learn and how I remember. My reply is that I am not so unusual, as a memorian, as they think. Granting for the sake of argument that I had a good natural memory to begin with, I do not think I should have been able to do what I have done without systematic cultivation. I resolved to make dates my speciality, and I laid my plans accordingly. I shut myself out from every disturbing factor—I lost myself in my date-learning because I liked it, and because I had resolved to know and to remember. First, I looked at the printed fact—say the Battle of Thermopylae, B.C. 480. I saw it clearly before me. Then I closed my eyes, and in a few seconds I had got the date for all time. *Attention*, and again attention. Is there anything wonderful in that ? No. *You* can do it. My experience is that the people who forget really never learn; they just glance at men and things, never acquiring a proper knowledge of the facts. A man of ordinary memory can master huge masses of material if he will follow my method, which has nothing artificial in it. I never used mnemonics—just brains."

X. COMMERCIAL VALUE OF CONCENTRATION.

23. Huxley has said that " perhaps the most valuable result of all education is the ability to make yourself do the thing you have to do when it has to be done, *whether you like it or*

not ; it is the first lesson which ought to be learned, and however early a man's training begins it is probably the last he learns thoroughly." That is emphatically true. The brisk enjoyment of the seaside, as we watch the spectacle, appeals to our susceptibilities, and we feel prompted to join those who are on pleasure bent ; but the ability to restrain ourselves for a time and concentrate on more important things is an ability which is worth having and worth cultivating. To gain attention is often the secret of success in life. Some of the largest salaries in the world are paid to men who can write eye-catching advertisements. The poster designer may work an hour one morning and earn £50 because he can do something to catch the eye of the public which others cannot do. In fact, business life has largely resolved itself into a battle to secure the attention of the people.

XI. MIND-WANDERING "FREAKS."

24. The Pelman Institute has found in its long and varied experience that there are men in the world who have efficient minds, and yet, in the ordinary sense, are incapable of concentration. Their minds are almost like searchlights which are not long held in a fixed position. When they give their attention to a subject, it is in the manner of a series of flashes, and if they do not see through a thing at once, no amount of effort enables them to see farther through it at the moment. Professor William James has some interesting observations to make on this theme. He says : " Some of the most efficient workers I know are of the ultra-scatter-brained type. One friend, who does a prodigious quantity of work, has in fact confessed to me that, if he wants to get ideas

on any subject, he sits down to work at something else, his best results coming through his mind-wanderings. This is perhaps an epigrammatic exaggeration on his part ; but I think seriously that no one of us need be too much distressed at his own shortcomings in this regard. Our mind may enjoy but little comfort, may be restless and feel confused, but it may be extremely efficient all the same." We are bound to admit the type is not very plentiful, and no student should plume himself that he belongs to this unusual group.

XII. CONDITIONS OF SUCCESS.

25. The first effort of the student should be directed to the discovery of what are precisely his own difficulties in this matter. For instance, a man whose lack of attention is due to physical condition would be making a mistake to subject himself to severe mental discipline until the physical factor has been put right. Again, another student may find that he cannot succeed in concentration until he has become really interested in his subject or his work. Therefore a few initial experiments should be conducted to make future plans all the easier. These experiments are best decided by the student himself—indeed, experience will already have taught him some of them. How long can you read a book without allowing your mind to wander off into side issues? This is a normal test depending, to some extent, on the nature of the book. but unless a man can hold down his attention to a few pages of a book in which he is not particularly interested, he needs rigid discipline.

The "Series" as an Aid to Concentration.

26. The regular daily repetition forwards *and backwards* of a long "series" of connected words,

like the "Town" series in Lesson IV, has been found by an immense number of Pelman students to be an absolute cure for even very severe cases of mind-wandering of many years' standing. If you use this method you should add from 10 to 25 words daily to your series until it extends to 1,000 words. It is, however, of the utmost importance that no series, or portion of a series, should be repeated regularly when the repetition has become merely a mechanical act and no longer demands the exercise of conscious thought.

It is possible that several of the exercises for the development of concentration may appear somewhat tedious to the student, but the possession of a satisfactory power of concentration is worth some effort. It is notorious that in the Universities the highest academic distinctions are more frequently won by the man of concentration than by the man of innately brilliant genius; and even in ordinary everyday life there are many responsible positions which can more fitly be filled by individuals capable of prolonged mental application than by those of more outwardly conspicuous attainments.

The Emotionalism of the Age.

27. A frequent obstacle to concentration is an unrestrained emotionalism. It is probably in some measure due to the ever-increasing pressure of modern life that throughout the world there seems to be a tendency to throw off self-restraint and to give way to impulse. This proclivity is fostered in the schools of to-day, where each lesson is much shorter in duration than was the case a century ago, while every effort is also made to render the subject of instruction as pleasant as possible to the student. Although there are undoubtedly arguments in favour of this practice, it is clear

that it must operate prejudicially to concentration, for the youthful mind is not trained, as it formerly was, to devote its continued attention to matters not inherently pleasing to it. As a natural result, the emotions of pleasure or of dislike are constantly being emphasized. A too assiduous devotion to the newspaper, the weekly journal, or even the somewhat more consecutive monthly magazine contributes to produce the same effect.

The "Restless" Habit.

28. So intimate is the connection between the mental and the physical world that this intellectual restlessness of the age is reflected in the habits and the personal manners of the human race. Notice how comparatively rare it is in the theatre or the concert hall to find a person who can sit still for a quarter of an hour consecutively (without fidgeting), even with the interest of the stage to occupy the attention. There is an incessant interaction between the body and the mind, and we shall formulate an Exercise based on this fact.

"DON'TS"

1. Don't go through life with your eyes and ears shut. That is the way to become a pessimist.

2. Don't merely *see* and *hear* all you can : *understand* it.

3. Don't try to classify everything : but know all there is to be known about what is important to you.

4. Don't complain of lack of concentration so long as you can keep your attention within the circle of closely related topics.

5. Don't endeavour to concentrate when the surroundings are against it. Wait for a better opportunity.

6. Don't forget what Datas says about "Attention, Attention."

EXERCISES.

Exercise XVI.

Paraphrasing, that is, rewriting a sentence or a paragraph so as to give it the same sense in other words, is an excellent exercise in concentration. The method may be illustrated as follows :—

Butler in his *Hudibras* says,

> "Money, th' only power
> That all mankind fall down before."

Rewritten it might be rendered thus : —

> "The Money King alone receives homage from all men," or,
> "One Power only is Supreme—
> Money bends every knee."

Of course, Butler was mistaken in his estimate of all mankind, but that is not the question. We have to paraphrase his meaning and thus exercise our powers of concentration.
Below we give other passages for this purpose. After reading a passage through, and assuring yourself you understand it, try to state its meaning *aloud*, with as little hesitation as possible. You may not succeed at first, but this method will help you in finding new words. Take sufficient time to complete the work, and, if your mind wanders, make a note of the number of times you transgress in this way.

(1) "Persistency is everything. It is not enough to set business going, to give it direction and a start. You must follow it up, and never take your hand off until the very end."
Guicciardini.

(2) "Never forget the purpose for which a man lives is the improvement of the man himself, so that he may go out of this world having in his great sphere, or his small one, done some little good to his fellow creatures, and laboured a little to diminish the sin and sorrow that are in the world."

W. E. Gladstone.

Exercise XVII.

The proper way to carry out a *régime* in concentration is to contrast the results of efforts arising out of attention to subjects which you like, and subjects you do not like. Let us suppose that you are deeply interested in politics, and that a new book has been published on Woman Suffrage. As you read it, there will be very little difficulty in holding your attention down to the arguments. The danger will be that you will compare this book with other books you know, and begin to think of persons rather than ideas. Of course, in a sense, this is not "mind-wandering" at all, as you are still keeping within the limits : but the author's meaning should be the first aim ; next, comparison with other writers of the same type ; and the third point is, as to how far the new author has advanced our knowledge of the subject. Thus the real secret of concentration is, not in focusing the attention for a long time on one point, but in knowing how to move focused attentions in an orderly manner.

By selecting a subject for which you have a pronounced dislike, and by holding your attention, page after page, you are strengthening concentrative powers on Spartan lines. Find a time to do this occasionally, as it will repay effort. Of course, you can overdo

such exercises, and much must be left to individual judgment in working them out.

Exercise XVIII.

It is good practice to sit down at the end of the day, and, closing your eyes, go mentally through the events that transpired.

The object is a mental recital of those events in the order of their occurrence ; and the end in view is the development of the ability to do this at any time desired, or to do mental reconstructions involving the same operations. No more than ten or fifteen minutes should be occupied at first, and it is unwise to cudgel the brain into action if it does not seem disposed to do what is required of it.

SPECIAL EXERCISES FOR MIND TRAINING AND HEALTH

By EUSTACE MILES, M.A.

The exercises prepared by Mr. Miles will suit the requirements of the majority of students, but where exercises of a special character, and advice as to diet and matters of a confidential nature are concerned, the Secretary of the Pelman Institute will give an introduction to Mr. Miles, who has consented to treat all Pelman students at special fees.

Sixth Lesson

Before beginning the exercises, once again go through some of the advantages; recall the new ones mentioned in the Fifth Lesson—namely, the advantages for enjoyment and the feelings; the advantage with regard to mental as well as physical poise and balance; and the opportunity which the right exercises give for Self-suggestion of invigorating and helpful thoughts and ideas.

It is surprising how effective this Self-suggestion is. Have you ever tried saying to yourself, the last thing at night, that you will wake at a certain hour the next morning, say at 6 o'clock? Well, there is no reason why you should not extend this principle, and, as a great writer has advised, say to yourself last thing at night that the next day you will get through your work comfortably and successfully, and that everything will go smoothly. Do not mention that you will not feel annoyed or tired; keep such words as annoyance and tiredness out of your mind. Simply lay stress on the *ease* and *pleasantness* and *success* of the next day's work.

The right time for Self-suggestion is just before you fall asleep.

The best times for recalling the advantages of the right exercises are while you dress and while you undress. Except for occasional practice, you gain little by attending to the different movements and actions of the actual dressing and undressing.

It is as well sometimes, however, to attend to these on purpose; for instance, while you have your bath, enter thoroughly into the sensation of spongeing yourself with water; while you brush your hair, enter thoroughly into the muscular movement of the brushing, and the sensations upon the skin of the head and upon the hair.

I.—In Bed.

Go through the chest breathing described in the Fifth Lesson: that is to say, hold your hands about the middle of your ribs, and, as you inhale through the nostrils with mouth closed, send your ribs forwards and outwards; hold them thus for a moment or two; then draw them inwards as you exhale; and, at the end of the exhaling, press in gently with the hands, so as to empty the lungs more thoroughly.

The new exercise is another one in muscular breathing, corresponding to the abdominal one in the Second Lesson. Here, when you have inhaled as before, with your hands over your ribs, do not exhale at once, but, while you hold in the breath, draw the ribs in; then let them out again; then draw them in again; so as to compel the air which you have inhaled to circulate freely throughout the lungs. Then, if there is any air left, exhale it.

Still lying in bed, and keeping both your hands and arms limp, and your left leg and foot limp, bring your right leg up; bring it up bent, with the toes as far as they will go from you, so as to stretch the front muscles of the legs. Draw the right knee up towards your chest; do not let your chest come forward to meet your knee. Keep your head well back, and your chin in. Then shake out your right foot and leg; let them rest. Go through the exercise with your left foot and leg instead.

Next, instead of being content with this partial movement, go through the same movement with your right leg, letting your left leg rest; but this time draw your right knee towards your chest with your two hands. You will be surprised how much further you can go by the help of the hands. It was just the same in the breathing exercises, in which the hands helped you to exhale more thoroughly. And then shake out and rest that right leg, and do the exercise with the left leg instead.

Then, if you are strong enough, do it with the two legs together.

Then rest, and relax, and recall the successive exercises in imagination and memory. You ought to find this fairly easy.

The movements have many advantages, not only in strengthening important muscles of the trunk, but also in squeezing and massaging the liver and the stomach. It is the right leg that has most effect upon the liver, the left leg that has most effect upon the stomach.

II.—Out of Bed.

Stand with your legs comfortably apart, keeping your feet firm on the ground, and keeping your knees well back. It is most important in this exercise to have the small of the back hollow, and the chin in; or you may, if you like, look up to the ceiling, with the head well stretched back, but, of course, without strain. First, keep your left hand and arm relaxed and limp; then bend your right arm, and bring the back of your right hand under your chin; keep your right elbow close to your right ribs. Send your right hand quietly up in front of you, this time with the fingers stretched back, but kept all together. The palm should be away from you, not facing. Now send your right thumb further forward and downward, and sweep round quietly with your right arm, still kept stiff as you would in some kinds of swimming. Bring it back, and bring your shoulder back and down till your right hand and arm are

down; then bring them up again to the first position, and repeat twice. Keep your left hand and arm limp; do not let them "sympathise" with the movement. Now shake out that right hand and arm; let them in their turn be relaxed and limp, and go through a similar exercise with the left hand and arm. Then do it with the two sides together. Then rest, and recall the exercise in imagination.

As you are going to your work in the morning, recall some of the advice with regard to diet; see how many of the hints you can bring back to memory without referring to the Third and Fourth Lessons.

PELMAN LESSON VII.

Originality of ideas, treated of in Lesson VII, is a fascinating subject. And not only fascinating but really important. "New ideas" in commerce, in literature, art, and the other professions, mean progress.

In sending in the Work Sheets, write your name and address legibly, and add your registered number.

These Text Books are for Students only, and must not be shown or lent to anyone.